

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

PCT/IB2003/001753



Applicant's or agent's file reference 38R-PCT-07	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/IB2003/001753	International filing date (day/month/year) 09 April 2003 (09.04.2003)	Priority date (day/month/year) 09 April 2003 (09.04.2003)
International Patent Classification (IPC) or national classification and IPC C12N 11/04		
Applicant PROENOL INDUSTRIA BIOTECNOLOGICA, LDA		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:

- ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 09 November 2004 (09.11.2004)	Date of completion of this report 13 September 2005 (13.09.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/IB2003/001753

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-9 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 7-20, 26-31 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* 1-6, 21-25 received by this Authority on 23 August 2005 (23.08.2005)
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/IB 03/01753

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-31	YES
	Claims		NO
Inventive step (IS)	Claims	2, 3, 22-29	YES
	Claims	1, 4-21, 30, 31	NO
Industrial applicability (IA)	Claims	1-31	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following documents:

- D1: FR-A-2 519 022 (RHONE POULENC SA) 1 July 1983
(1983-07-01)
- D2: EP-A-0 578 617 (SIAPA SPA) 12 January 1994
(1994-01-12)
- D3: EP-A-0 350 374 (MOET & CHANDON) 10 January 1990
(1990-01-10)
- D4: FR-A-2 812 655 (LALLEMAND SA) 8 February 2002
(2002-02-08)

1. None of the documents cited in the international search report anticipates the present claims 1 to 31. Specifically, the presence of a physically separate nutrient supply in the binding medium is not described in documents D1 to D4.

It follows that the subject matter of claims 1 to 31 is novel (PCT Article 33(2)).

2. D3 is considered to be the prior art closest to the subject matter of claim 1 (cf. D3, pages 4 to 6, examples I to IV).

D3 differs from claim 1 in that it does not describe

the presence of a physically separate nutrient supply in one or more separate areas of the carrier medium.

According to the present application, the problem that the present invention is intended to solve is considered to be that of promoting access to the nutrients by the micro-organisms located furthest from the outside of the micro-organism binding medium (cf. page 2, line 19 to page 3, line 2 of the present application).

However, claim 1 in its present form does not appear to solve this technical problem over the entire scope thereof.

Indeed, for said technical problem to be solved, the nutrient supply must be located not at the outer boundary of the micro-organism binding medium but as far away as possible therefrom (cf. claims 2 and 3 and claim 22). However, no equivalent technical feature is present in claim 1. As a result, claim 1 does not solve the above-mentioned technical problem over the entire scope thereof.

No other specific technical problem linked to the fact that "the nutrient supply is physically separate in one or more separate areas" of the micro-organism carrier medium appears to have been solved by claim 1. Therefore, this technical feature is considered to be an arbitrary selection. Under no circumstances can the insertion of an arbitrary technical feature be considered to involve an inventive step. It follows that claim 1 does not involve an inventive step as defined in PCT Article 33(3).

The same argument applies *mutatis mutandis* to the subject matter of independent claims 21, 30 and 31,

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which thus do not involve an inventive step either.

Dependent claims 4 to 20 do not contain any features which, when combined with the features of any one of the claims to which they refer, might define subject matter that complies with the requirements of inventive step of the PCT (see documents D1 to D4 and the corresponding passages cited in the search report).

3. The subject matter of claims 2, 3 and 22 to 29 is not found in or obvious from the prior art.